WHAT IS CLAIMED IS:

1. A high frequency semiconductor device comprising:

a semiconductor substrate;

a ground plate connected to the ground potential;

at least one insulating interlayer;

a line conductor provided above said ground plate, with said at least one insulating interlayer provided therebetween;

at least one terminal for connecting to the exterior; and

a shield plate provided above the highest layer of the line conductor, with said at least one insulating interlayer provided therebetween, said shield plate being connected to the ground potential.

2. A high frequency semiconductor device according to Claim 1, wherein said at least one terminal is a wire-bonding pad.

3. A high frequency semiconductor device according to Claim 2, wherein said shield plate has an opening in an area in which the said wire-bonding pad is positioned.

4. A high frequency semiconductor device according to

Claim 2, wherein said wire-bonding pad is provided on said shield plate.

5. A high frequency semiconductor device according to Claim 1, wherein said shield plate substantially covers the entirety of said semiconductor substrate.

6. A high frequency semiconductor device according to Claim 1, further comprising:

a plurality of throughholes formed in the periphery of said shield plate so as to surround an inner area excluding the periphery, the throughholes reaching said ground plate; and

internal conductors provided in the throughholes, said internal conductors connecting said shield plate and said ground plate.

7. A high frequency semiconductor device according to Claim 1, wherein said at least one terminal leads from the back of said semiconductor substrate.

8. A high frequency semiconductor device according to Claim 1, wherein said at least one terminal is connected to the surface of said semiconductor substrate by a viahole penetrating said semiconductor substrate.

9. A high frequency semiconductor device according to Claim 7, wherein said at least one terminal is a flip chip pad.

10. A high frequency semiconductor device according to Claim 1, wherein:

said semiconductor substrate is divided into an element-arranged area in which semiconductor elements are formed and an outer area around said element-arranged area in which at least one terminal is provided; and

said shield plate selectively covers said element-arranged area.

11. A high frequency semiconductor device according to Claim 10, wherein further comprising:

a plurality of throughholes formed in the periphery of said shield plate so as to surround an inner area excluding the periphery, the throughholes reaching said ground plate; and

internal conductors provided in the throughholes, said internal conductors connecting said shield plate and said ground plate;

wherein said at least one terminal and said element-arranged area are made in conduction by an area in which the

throughholes are not provided.

12. A high frequency semiconductor device according to Claim 1, wherein said terminal is an antenna.

13. A high frequency semiconductor device according to Claim 12, wherein said shield plate has an opening in a portion corresponding to said antenna.

14. A high frequency semiconductor device according to Claim 12, wherein a terminal for electrically connecting to the exterior is further provided on the back of said semiconductor substrate.

15. A high frequency semiconductor device according to Claim 14, wherein said terminal is connected to the surface of said semiconductor substrate by a viahole penetrating said semiconductor substrate.

16. A high frequency semiconductor device according to Claim 14, wherein said terminal is a flip chip bonding.

17. A high frequency semiconductor device according to Claim 12, wherein said ground plate is used as an antenna grand plane in said antenna.

18. A high frequency semiconductor device according to Claim 12, wherein said antenna is provided on said shield plate, and said shield plate is used as an antenna grand plane.

19. A high frequency semiconductor device according to Claim 12, wherein said antenna is a patch antenna.

20. A high frequency semiconductor device according to Claim 1, wherein said at least one insulating interlayer is made of one of polyimide and benzocyclobutene.